CLAIMS

1. A ferrite material comprising a sintered body comprising as main constituents, 62 to 68 mol% of Fe_2O_3, 12 to 20 mol% of ZnO, 0.2 to 5 mol% of NiO, and the balance being substantially MnO; and

the saturation magnetic flux density thereof at 100°C is 450 mT or more (magnetic field for measurement: 1194 A/m), and the minimum core loss value thereof is 1200 kW/m^3 or less (measurement conditions: 100 kHz, 200 mT).

2. A ferrite material comprising a sintered body comprising, as main constituents, 62 to 68 mol% of Fe_2O_3, 12 to 20 mol% of ZnO, less than 4 mol% (not inclusive of 0) of $LiO_{0.5}$, and the balance being substantially MnO.

3. The ferrite material according to claim 2, wherein:

the content of $LiO_{0.5}$ in said sintered body is from 0.2 to 3 mol%.

4. A ferrite material comprising a sintered body comprising, as main constituents, 62 to 68 mol% of Fe_2O_3, 12 to 20 mol% of ZnO, 5 mol% or less (not inclusive of 0) of NiO, less than 4 mol% (not inclusive of 0) of $LiO_{0.5}$, and the balance being substantially MnO.

5. The ferrite material according to any one of claims 1 to 4, wherein:

said ferrite material comprises, as first additives, 250 ppm or less (not inclusive of 0) of Si in terms of SiO_2 and 2500 ppm or less (not inclusive of 0) of Ca in terms of $CaCO_3$.

6. A ferrite material comprising a sintered body comprising as main constituents, 62 to 68 mol% of Fe_2O_3, 12 to 23 mol% of ZnO, and the balance being substantially MnO; and as first additives, 80 to 250 ppm of Si in terms of SiO_2 and 800 to 2500 ppm of Ca in terms of $CaCO_3$; wherein:

the saturation magnetic flux density thereof at 100°C is 450 mT or more (magnetic field for measurement: 1194 A/m) and the minimum core loss value thereof is 1200 kW/m^3 or less (measurement conditions: 100 kHz, 200 mT).

7. The ferrite material according to claim 5 or 6, wherein:

the weight ratio between said content of SiO_2 and said content of $CaCO_3$ (SiO_2 content/$CaCO_3$ content) is 0.04 to 0.25.

8. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

said ferrite material comprises, as second additives, one or more selected from the group consisting of Nb_2O_5: 400 ppm or less (not inclusive of 0), ZrO_2: 1000 ppm or less (not inclusive of 0), Ta_2O_5 :1000 ppm or less (not inclusive of 0), In_2O_5: 1000 ppm or less (not inclusive of 0), and Ga_2O_5: 1000 ppm or less (not inclusive of 0).

9. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

said ferrite material comprises, as third additives, one or both of SnO_2: 10000 ppm or less (not inclusive of 0) and TiO_2: 10000 ppm or less (not inclusive of 0).

10. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

said ferrite material comprises, as fourth additives, one or more selected from the group consisting of a P compound: 35 ppm or less (not inclusive of 0) in terms of P, MoO_3: 1000 ppm or less (not inclusive of 0), V_2O_5: 1000 ppm or less (not inclusive of 0), GeO_2: 1000 ppm or less (not inclusive of 0), Bi_2O_3: 1000 ppm or less (not inclusive of 0), and Sb_2O_3: 3000 ppm or less (not inclusive of 0).

11. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

the bottom temperature at which the core loss thereof exhibits the minimum value falls within a range between 60 and 130°C.

12. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

the saturation magnetic flux density thereof at 100°C is 480 mT or more (magnetic field for measurement: 1194 A/m).

13. The ferrite material according to claim 12, wherein:

the initial permeability thereof at room temperature is 700 or more.

14. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

said sintered body has a relative density of 93% or more and a mean grain size of 5 to 30 μm.

15. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

the saturation magnetic flux density thereof at 100°C is 480 mT or more (magnetic field for measurement: 1194 A/m) and the minimum core loss value thereof is 1100 kW/m^3 or less (measurement conditions: 100 kHz, 200 mT).

16. The ferrite material according to any one of claims 1, 2, 4 and 6, wherein:

the saturation magnetic flux density thereof at 100°C is 500 mT or more (magnetic field for measurement: 1194 A/m), the minimum core loss value thereof is 1000 kW/m^3 or less (measurement conditions: 100 kHz, 200 mT), the bottom temperature at which the core loss thereof exhibits the minimum value is from 80 to 120°C, and the initial permeability thereof at room temperature is 800 or more.